

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of screening a subject having or at risk of having a neurological disorder comprising, analyzing a tissue sample from the subject to determine the presence of β -N-methylamino-L-alanine (BMAA) ~~a neurotoxic amino acid~~ or a BMAA ~~neurotoxic~~ derivative, wherein BMAA or a BMAA derivative is thereof associated with the neurological disorder.
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Currently amended) The method of Claim 14, wherein protein-bound BMAA is analyzed.
6. (Previously presented) The method of Claim 5, wherein free BMAA is also analyzed.
7. (Previously presented) The method of Claim 1, wherein the subject has symptoms of a neurological disorder.
8. (Previously presented) The method of Claim 1, wherein the subject is asymptomatic for a neurological disorder.
9. (Previously presented) The method of Claim 1, wherein the subject has been identified as being at risk for developing a neurological disorder.
10. (Currently amended) The method of Claim 1, wherein the presence of a detectable level of BMAA ~~a neurotoxic amino acid~~ or a BMAA ~~neurotoxic~~ derivative thereof indicates a neurological disorder.
11. (Previously presented) The method of Claim 1, wherein the neurological disorder is a neurofibrillary tangle disorder (NFT disorder).
12. (Previously presented) The method of Claim 11, wherein the neurological disorder is amyotrophic lateral sclerosis-Parkinsonism dementia complex (ALS-PDC).
13. (Previously presented) The method of Claim 11, wherein the neurological disorder is Alzheimer's disease.

14. (Withdrawn) The method of Claim 11, wherein the neurological disorder is progressive supranuclear palsy.
15. (Withdrawn) The method of Claim 1, wherein the neurological disorder is a movement disorder.
16. (Withdrawn) The method of Claim 15, wherein the movement disorder is Parkinson's disease.
17. (Withdrawn) The method of Claim 1, wherein the neurological disorder is a motor neuron disease.
18. (Withdrawn) The method of Claim 17, wherein the motor neuron disease is amyotrophic lateral sclerosis (ALS).
19. (Previously presented) The method of Claim 1, wherein the screening method predicts the likelihood of developing a neurological disease.
20. (Previously presented) The method of Claim 19, further wherein the method predicts the latency period prior to onset of the neurological disorder.
21. (Previously presented) The method of Claim 1, wherein the screening method predicts the severity of the neurological disorder.
22. (Previously presented) The method of Claim 1, wherein the tissue sample is neurological tissue.
23. (Previously presented) The method of Claim 22, wherein the neurological tissue is associated with the central nervous system (CNS).
24. (Previously presented) The method of Claim 23, wherein the tissue is brain tissue.
25. (Withdrawn) The method of Claim 23, wherein the tissue is cerebral-spinal fluid (CSF).
26. (Withdrawn) The method of Claim 22, wherein the neurological tissue is associated with the peripheral nervous system (PNS).
28. (Withdrawn) The method of Claim 1, wherein the tissue is non-neurological tissue.
29. (Withdrawn) The method of Claim 28, wherein the tissue is keratinous tissue.
30. (Withdrawn) The method of Claim 29, wherein the tissue is hair.
31. (Withdrawn) The method of Claim 29, wherein the tissue is skin.

32. (Withdrawn) The method of Claim 29, wherein the tissue is nail.
33. (Withdrawn) The method of Claim 32, wherein the nail is a fingernail.
34. (Withdrawn) The method of Claim 32, wherein the nail is a toenail.
35. (Withdrawn) The method of Claim 29, wherein the tissue is a feather.
36. (Withdrawn) The method of Claim 29, wherein the tissue is a claw.
37. (Withdrawn) The method of Claim 29, wherein the tissue is a hoof.
38. (Withdrawn) The method of Claim 29, wherein the tissue is a horn.
39. (Withdrawn) The method of Claim 28, wherein the tissue is non-keratinous tissue.
40. (Withdrawn) The method of Claim 39, wherein the tissue is blood.
41. (Withdrawn) The method of Claim 40, wherein the tissue is serum.
42. (Withdrawn) The method of Claim 39, wherein the tissue is saliva.
43. (Withdrawn) The method of Claim 39, wherein the tissue is urine.
- 44-76. (Cancelled)